

## **Four Corners Air Quality Group**

### **Update on Recent Agency Activities –September 9, 2013**

#### **EPA's Activities**

##### **Tribal Minor NSR Permit Rule**

- Allows EPA Region 8 to review applications for and issue minor NSR permits to industrial facilities within the federally-recognized external boundaries of Reservations such as those of the Southern Ute and Ute Mountain Ute in the Region (Colorado, Utah, Montana, Wyoming, North Dakota, and South Dakota).
- Applies to new industrial facilities or modifications at existing industrial facilities with projected emissions that are more than the minor NSR thresholds but less than the major NSR thresholds, which are generally 100 to 250 tons per year (tpy).
- EPA can delegate permit authority to tribes in the Region that request it and are able to demonstrate appropriate capability to implement a minor NSR permit program. Within Region 8, for example, the Southern Ute Indian Tribe has expressed an interest in developing an air permit program.

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##### **Regional Haze**

- Air emission controls for NO<sub>x</sub> and SO<sub>x</sub> from large stationary sources (power plants) from recently implemented regional haze plans will help improve visibility at Class I areas in the Four Corners *such as Mesa Verde NP and the Weminuche Wilderness Area*.
- *Final* approval of Colorado's regional haze SIP was reached on Dec 31, 2012.
- Final partial approval and partial disapproval of Utah's regional haze SIP was reached on Dec. 14, 2012.
- EPA Regions 6 & 9 are implementing Regional Haze efforts in New Mexico and on the Navajo Reservation.

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##### **Ozone Advance**

- The Utah DEQ and the Ute Indian Tribe of the Uintah and Ouray Indian Reservation have enrolled in the Ozone Advance program for the Uintah Basin area and the Wyoming DEQ for the Upper Green River Basin area. Ozone Advance program is a collaborative effort to encourage ozone attainment areas to take near-term steps to reduce emissions so they can continue to meet the NAAQS; air quality improvements can ensure continued health protection and provide a buffer against future violations of the standard.

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##### **Other**

- EPA updated the 2012 performance standards for oil and natural gas to address VOC emissions from storage tanks used by the crude oil and natural gas production industry on August 2, 2013.
- Strengthened the annual health National Ambient Air Quality Standard for fine particles (PM<sub>2.5</sub>) to 12.0 micrograms per cubic meter (µg/m<sup>3</sup>). The agency also retained the existing standards for coarse particle pollution (PM<sub>10</sub>).
- The Clean Air Act-mandated five-year NAAQS review of the existing ozone standard is still underway. EPA expects to release for [Clean Air Scientific Advisory Committee \(CASAC\)](#) and

public review the second draft Risk and Exposure Assessments and the Policy Assessment in early December 2013. EPA HQ has requested that the next meeting of the CASAC Ozone Review be scheduled for March 2014 to allow three months for CASAC and public review.

- The 2012 Uintah Basin Ozone Study (UBOS) was designed to identify the causes of high winter ozone concentrations in the Uintah Basin in Utah. Meteorological conditions during UBOS 2012 were not conducive to ozone formation due to a lack of snow cover, and no exceedances of the ozone National Ambient Air Quality Standard (NAAQS) were observed during UBOS 2012. However, the 2012 study was valuable for characterizing emissions sources within the basin. Key findings from UBOS 2012 are described in a summary report (<http://www.deq.utah.gov/locations/uintahbasin/2012study.htm>).
- A follow-on study, UBOS 2013 took place between January and March 2013. In contrast to UBOS 2012, conditions during UBOS 2013 were favorable to ozone formation and numerous exceedances of the NAAQS were observed. Ozone concentrations exceeded the 8-hour ozone NAAQS (75 ppb) by as much as 103% (152 ppb), and the ozone NAAQS was exceeded on 41 days. Analysis of the data is currently in progress, and a report on the 2013 UBOS study is planned for release in December 2013.
- Finalized approval of Greenhouse Gas Tailoring rules for North Dakota and Wyoming (pending Administrator's signature); proposed approval for Utah.

### **Southern Ute Indian Tribe's Activities**

The Tribe to become a signatory party to the *Memorandum of Understanding for the Interagency Policy Oversight Group of the Four Corners Air Quality Group*.

Air Monitoring: <http://www.southernute-nsn.gov/air-quality/ambient-monitoring>

- In May 2013, the EPA approved the Tribe's Air Quality Program revised QAPP for air monitoring on the Reservation that includes continuous particulate monitor (model Teledyne 602 BETA<sup>PLUS</sup>) at the Ute 3 air monitoring station.
- Obtained Tribal Council approval to submit the 2011 Reservation Title V actual emissions information to the National Emissions Inventory database. The 2011 Reservation Title V actual emissions information was collected from the EPA Part 71 annual fee forms.

Tribe's Part 70 Operating Permit Program website: <http://www.southernute-nsn.gov/air-quality/part-70>

- On July 8, 2013, the EPA approved delegation to the Southern Ute Indian Tribe to implement and enforce National Emission Standards for Hazardous Air Pollutants and New Source Performance Standards as a direct final rule. The direct final rule is effective on September 6, 2013: <https://federalregister.gov/a/2013-16327> .

SUIT/CO Environmental Commission: <http://www.southernute-nsn.gov/air-quality/environmental-commission>

- Commission meetings held on November 14, 2012, January 9, 2013, March 19, 2013, and June 5, 2013.
  - November 14, 2012 - direct final rulemaking action on (1) the incorporation by reference certain NSPS and NESHAP to the Reservation Air Code and (2) certain non-controversial revisions to the Commission's Title V Operating Permit Program. Public comments ended on December 29, 2012. The direct final rule is effective upon approval by the EPA. The public notice and materials are available on the Environmental Commission website.

- March 19, 2013 – revised its Commission Procedural Rules.
- June 5, 2013 – revised the “Long-Term Plan for the Reservation Air Program”
- Next meeting is scheduled for October 16, 2013. The agenda will be available on the Environmental Commission website.

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<http://www.southernute-nsn.gov/air-quality>

## **Federal Land Managers’ Activities**

### **Oil and Gas**

- June, 2011 Memorandum of Understanding: Multi-Agency Air Quality Analyses and Mitigation for Federal Oil and Gas Decisions through the NEPA Process (NPS, FWS, BLM, USFS, EPA) provides for:
  - interagency consultation throughout the NEPA process,
  - common procedures for determining appropriate AQ analyses,
  - specific provisions for analyzing and discussing impacts to AQ and for mitigating such impacts,
  - and a dispute resolution process.
  - <http://www.epa.gov/compliance/resources/policies/nepa/air-quality-analyses-mou-2011.pdf>
  - <http://www.nature.nps.gov/air/hot/index.cfm>
- NO<sub>x</sub> emissions stipulation required for new stationary gas field compressor engines
- Facility optimization/centralization/co-location included in Land Use Plans for new development
- Condensation tank and petroleum liquid storage tank VOC controls for SW Colorado
- Low-bleed pneumatic devices required
- Reduced emission gas well completions included in Land Use Plans
- Mandatory continuous dust abatement
- Land Use Plans call for use of low or zero emission dehydrators
- Vapor recovery units or combustors for tank batteries, dehydrators, separators
- Collaboration among agencies on energy development planning including proposed leasing near Chaco Culture National Historical Park and Mesa Verde National Park, and regional air quality modeling to predict the effects of development in SW Colorado and NW New Mexico.

### **Monitoring Activities**

- Ozone: Bayfield, CO (Shamrock site); Mesa Verde National Park; Coyote Ranger District, Santa Fe National Forest (early Summer 2012), Norwood, Colorado (installed 2010)
- Mercury: Molas Pass, Mesa Verde National Park
- Visibility: Engineer Mountain; Bayfield, CO (Shamrock site); San Pedro Parks, Santa Fe National Forest (early Summer 2012)
- NO<sub>x</sub> – Shamrock, Bayfield Colorado
- Atmospheric deposition/wilderness lake sampling
- Wet/Dry Deposition: Mesa Verde National Park, Bayfield, CO (Shamrock site); Molas Pass; Wolf Creek Pass; San Pedro Parks Wilderness (Fall 2009)
- NH<sub>x</sub> monitoring: Mesa Verde, CO, Bandelier, NM, Chiricahua, AZ
- IMPROVE Speciated PM<sub>2.5</sub> monitoring representative of all Class I areas
- Mesa Verde National Park participates in a multi-agency dust monitoring network spread across the Colorado Plateau. Includes a webcam that records dust storms in the area. Impacts of recent, major

dust deposition events include reduced visibility and the early onset of snowmelt.

<http://www.nps.gov/meve/naturescience/dustmonitoring.htm>

- Throughfall/lichen monitoring for nitrogen, sulfur, & metals in northwest New Mexico on Carson and Santa Fe National Forest & potentially Mesa Verde (Fall 2013)
- Lichen monitoring (species and elemental analysis) through BYU at Wheeler Peak, San Pedro Parks, and Pecos Wilderness (Summer 2013-Summer 2014)
- Lichen monitoring through FIA in New Mexico (2010- preliminary data is now available)

#### Ongoing Commitments

- Active participation in Four Corners Air Quality Policy Oversight Group
- Collaboration among agencies on data exchange and retrieval
- Continued support of modeling studies, monitoring sites, and partnerships

BLM is currently conducting an air quality analysis with photochemical modeling for development, including oil and gas production, in Colorado. This comprehensive study is called CARMMS, and will be expanded this fall to include the Mancos Shale development in northwestern New Mexico. Modeling results should be available in 2014.

#### Navajo Nation EPA's Activities

The Open Burn Regulations, under the authority of the Navajo Nation Air Quality Pollution Prevention and Control Act, were approved by the Navajo Nation Council on November 20, 2012. The regulations are intended to reduce emissions from open burning disposal practices by prohibiting open burning, unless for an exempt activity, and supporting alternative disposal methods and practical burning methods.

#### Operating Permit Program

- BART
  - Four Corners Power Plant (FCPP) facility operator and majority owner Arizona Public Service required to choose between two options: 1) comply with plant-wide NO<sub>x</sub> emission limit of 0.11 lb/MMBTU by October 23, 2017 or 2) retire units 1, 2, and 3 by January 1, 2014, and comply with emission limit of 0.098lb/MMBTU on units 4 and 5 by July 31, 2018. APS requested EPA notification deadline extension to December 31, 2013, due to reexamination of the Arizona retail electric market deregulation by the Arizona Corporation Commission, which may change the BART compliance strategy.
  - Navajo Generating Station (NGS) required to install Selective Catalytic Reduction (SCR) on all three units and limit NO<sub>x</sub> emissions to 0.055 lb/MMBTU by 2018. Alternatives proposed by the EPA include providing an additional 5 years, until 2023, to install SCR's on all three units and achieve NO<sub>x</sub> emissions limit of 0.055 lb/MMBTU, due to the Tribal Authority Rule and NGS not subject to the same legal deadlines as sources on state land. A Technical Work Group proposal for "Reasonable Progress Alternative to BART," which achieves greater NO<sub>x</sub> emission reductions than the EPA's Proposed BART rule, was submitted to the EPA on July 26, 2013, and is under review.
- Title V Permits & Tribal New Source Review
  - 7 permits up for renewal, applications incomplete.
  - 2 auto body shops and 83 fueling stations registered for the T-NSR.

#### Air Quality Control Program

- Ambient Air Monitoring
  - Continuous PM10, NO<sub>x</sub>, SO<sub>2</sub>, and ozone monitoring in Shiprock, NM
  - Continuous PM10 monitoring in Crownpoint, NM
  - 24 hour PM2.5 sample run every 6 days in Nazlini, AZ
  - Continuous meteorological monitoring at all 3 sites
  - Continuous ozone monitoring in Aneth, UT, in response to community concerns (temporary)

## **Colorado's Activities**

### **Air Quality Monitoring**

- Ozone and PM2.5 monitoring in Cortez
- PM10 monitoring in Durango and Pagosa Springs
- Colorado monitoring in the Four Corners area shows attainment with the ozone, PM2.5 and PM10 NAAQS.

### **Oil and Gas**

- Partial adoption of NSPS OOOO in October 2012
- Initiation of a stakeholder process to consider additional regulatory requirements for upstream oil and gas facilities
  - Intensive stakeholder process from January 2013 through August 2013
  - Regulatory proposal anticipated in late 2013
  - Additional requirements being considered include:
    - Additional control requirements for new and existing storage tanks
    - Requirements to ensure good capture of hydrocarbon vapors for controlled storage tanks
    - Leak detection requirements for well production facilities and compressor stations
    - Require auto-igniters for flares state-wide
    - Expand low/no bleed pneumatic controllers state-wide
    - Establish gas flaring/capture requirements at oil well sites
    - Full adoption of NSPS OOOO
- Four new inspectors with IR (infrared) cameras to assess hydrocarbon leaking/venting at upstream production facilities
- Colorado is working with researchers at Colorado State University to conduct a study on the impact of oil and gas production emissions on nearby citizens

### **Regional Haze**

- Colorado completed its Regional Haze State Implementation Plan in January 2012, which will result in approximately 35,000 tpy reduction of NO<sub>x</sub> and 36,000tpy of SO<sub>2</sub> by 2018.
- Collaborative and innovative process that resulted in the retirement of a number of older coal fired power plants
  - EPA full approved Colorado's Regional Haze plan on December 31, 2012
  - Current court challenge on limited aspects of approved plan
  - CDPHE currently working with sources on detailed implementation schedules for compliance with Regional Haze plan emission limits

## Public Outreach

- Continued expansion of the Western Colorado Regional Air Quality Collaboration with twenty eight counties and two cities participating as of July 2013
  - o Promotes ongoing engagement and education on air quality issues
  - o For more information check the website:  
[www.colorado.gov/cdphe/regionalAQcollaboration](http://www.colorado.gov/cdphe/regionalAQcollaboration)
- Enhanced air quality advisories covering more of the state and providing more complete information on air quality issues including impacts from wildfires, including the Four Corners region
- Visit our website or check us out on Facebook or Twitter for more information on Colorado air quality issues:  
<http://www.colorado.gov/cs/Satellite/CDPHE-AP/CBON/1251582562056>  
[www.facebook.com/cdphe.apcd](http://www.facebook.com/cdphe.apcd)  
[www.twitter.com/cdpheapcd](http://www.twitter.com/cdpheapcd)

## New Mexico's Activities

### Regional Haze:

- Best Available Retrofit Technology (BART) determination at San Juan Generating Station.
- 2013 Progress Report in the form of a SIP revision. The hearing is tentatively scheduled for December 2013

### Oil and Gas:

- Adoption of Quad O
- General Construction Permit developed for oil and gas industry customized to Quad O requirements for storage tanks
- Continuing cooperative projects with BLM Farmington Field Office including Condition of Approval on compressor engines 300 horsepower or less used during well production must be rated by the manufacturer as emitting NOx at 2 grams per horsepower hour or less
- Prepared inputs for the National Emissions Inventory 2011 upstream oil and gas sector including using customized WRAP data for the South San Juan Basin

### Continue to support and participate in Western Regional Air Partnership activities

- West-wide Jump Start Air Quality Modeling Study (WestJumpAQMS);
- participated in the EPA/WRAP Western Modeling Conference in Boulder, CO

### Ozone

- NM has a statute that requires a new plan with regulations be prepared to reduce ozone precursors if Ozone in any area of New Mexico exceeds 95% of the federal standard.

Cooperative projects to monitor ammonia, mercury and other pollutants with EPA and Los Alamos National Laboratories (LANL)

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